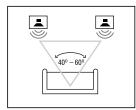
SPEAKER PLACEMENT

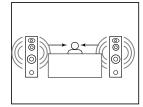
Proper placement of the speakers is an important step in obtaining the most realistic soundstage possible. These recommendations are for the optimum placement of the loudspeakers. Use these placement recommendations as a guide. Slight variations will not diminish your listening pleasure.

All of the Northridge E Series loudspeakers referred to in

this guide are video-shielded and can safely be placed near a television.

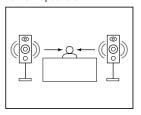
MODELS: E60, E80, E90, E100



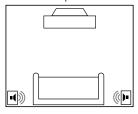


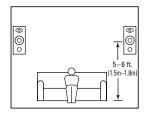
MODELS: E30, E50

As front speakers

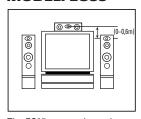


As surround speakers





MODEL: EC35



The EC35 center channel loudspeaker is designed to complement all of the Northridge E Series loudspeakers. It is the ideal way to re-create the cinematic experience in your home.



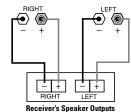
E30, E50, E60, E80, E90, E100, EC35

OWNER'S GUIDE

SPEAKER CONNECTIONS



MODELS: E30, E50, E60, E80, E90, E100



MODEL: EC35



Receiver Speaker Outputs

Speakers and electronics terminals have corresponding (+) and (-) terminals. It is important to connect both speakers identically: (+) on the speaker to (+) on the amplifier and (-) on the speaker to (-) on the amplifier. Wiring "out of phase" results in thin sound, weak bass and poor imaging.

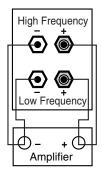
To use the binding-post speaker terminals, unscrew the colored collar until the pass-through hole in the center post is visible. Insert the bare end of the wire through this hole; then screw the collar down until the connection is tight.

The hole in the center of each collar is intended for use with banana-type connectors. To comply with European CE certification, these holes are blocked with plastic inserts at the point of manufacture. To use banana-type connectors requires the removal of the inserts. Do not remove these inserts if you are using the product in an area covered by the European CE certification.

BI-WIRING

The bi-wire connection method requires one amplifier and two sets of speaker wires. By removing the shorting bars, connections may be made to the individual network sections using four conductors, one for each of the four terminals.

For single-wire connection, leave the shorting bars in place and connect only a single set of speaker wires (two conductors) to the two upper terminals.



Bi-Wire Connections

MODELS: E30, EC35, E50

The supplied self-adhesive rubber feet may be attached to the bottom corners of your speakers to protect your furniture.

MODELS: E60, E80, E90, E100

These models feature four rubber feet that enable them to be placed on a smoothsurfaced floor, such as tile or hardwood. Four metal spikes are supplied for use when the speaker is to be placed on a carpeted surface, to decouple the speaker from the floor and prevent unwanted damping. To insert the spikes, gently lay the speaker on its side (not its front or back) on a soft. nonabrasive surface. Fach snike screws into the threaded insert in the center of each rubber foot. Make sure all four spikes are screwed in completely for stability.

NEVER drag the speaker to move it, as this will damage the spikes, the feet and/or the wood cabinet itself. Always lift the speaker and carry it to its new location.

CAUTION: Floorstanding (tower) loudspeakers have a high center of gravity and may become unstable and tip over during earthquakes, or if rocked, tipped or improperly positioned. If this is a concern, these speakers should be anchored to the wall behind them, using the same procedures and hardware customary for anchoring bookcases and wall units. The customer is responsible for proper installation and proper selection of hardware.

TROUBLESHOOTING

If there is no sound from any of the speakers:

- Check that receiver/amplifier is on and that a source is playing.
- Review proper operation of your receiver/amplifier.

If there is no sound coming from one speaker:

- Check the "Balance" control on your receiver/ amplifier.
- Check all wires and connections between receiver/ amplifier and speakers.
- Make sure no wires are touching other wires or terminals and creating a short circuit
- Make sure all wires are connected. Make sure none of the speaker wires are frayed, cut or punctured.
- In Dolby* Digital or DTS® modes, make sure that the receiver/processor is configured so that the speaker in question is enabled.
- Turn off all electronics and switch the speaker in question with one of the other speakers that is working correctly. Turn everything back on, and determine whether the problem has followed the speakers, or has remained in the same channel. If the problem is in the same channel. the source of the problem is most likely with your receiver or amplifier, and you should consult the owner's manual for that product for further information. If the problem has followed the speaker. consult your dealer for further assistance or, if that is not possible, visit www.jbl.com

for further

information.

If the system plays at low volumes but shuts off as volume is increased:

- Check all wires and connections between receiver/ amplifier and speakers.
- Make sure all wires are connected. Make sure none of the speaker wires are frayed, cut or punctured.
- If more than one pair of main speakers is being used, check the minimum impedance requirements of your receiver/amplifier.

If there is no (or low) bass output:

- Make sure the polarities (+ and –) of the left and right "Speaker Inputs" are connected properly.
- Consider adding a powered subwoofer to your system for use with digital ".1" surround formats

If there is no sound from the surround speakers:

- Check all wires and connections between receiver/ amplifier and speakers. Make sure all wires are connected. Make sure none of the speaker wires are frayed, cut or punctured.
- Review proper operation of your receiver/amplifier and its surround sound features.
- Make sure the movie or TV show you are watching is recorded in a surround sound mode. If it is not, check to see whether your receiver/ amplifier has other surround modes you may use.
- In Dolby Digital or DTS modes, make sure your receiver/processor is configured so that the surround speakers are enabled.
- Review the operation of your DVD player and the jacket of your DVD to make sure that the DVD features the desired Dolby Digital or DTS mode, and that you have properly selected that mode using both the DVD player's menu and the DVD disc's menu.

Declaration of Conformity

We, Harman Consumer International
2, route de Tours
72500 Chateau-du-Loir
France
declare in own responsibility that the products
described in this owner's manual are in compliance
with technical standards:
EN 50081-1:1992
EN 50082-1:1997

Gary Mardell Harman Consumer International Chateau-du-Loir, France 8/03

SPECIFICATIONS

E30	E50	E60	E80	E90	E100	EC35
Description 2-Way 6" bookshelf	Description 3-Way, 8" horizontal/vertical mirror-image bookshelf	Description 3-Way 8* floorstanding	Description 3-Way dual 6" floorstanding	Description 3-Way dual 8" floorstanding	Description 3-Way dual 10" floorstanding	Description 3-Way dual 5" center
Max. Recommended	Max. Recommended	Max. Recommended	Max. Recommended	Max. Recommended	Max. Recommended	Max. Recommended
Amplifier Power**	Amplifier Power**	Amplifier Power**	Amplifier Power**	Amplifier Power**	Amplifier Power**	Amplifier Power**
125W	175W	175W	200W	225W	250W	150W
Power Handling	Power Handling	Power Handling	Power Handling	Power Handling	Power Handling	Power Handling
(Continuous/Peak)	(Continuous/Peak)	(Continuous/Peak)	(Continuous/Peak)	(Continuous/Peak)	(Continuous/Peak)	(Continuous/Peak)
70W/280W	90W/360W	90W/360W	100W/400W	110W/440W	125W/500W	75W/300W
Nominal Impedance	Nominal Impedance	Nominal Impedance	Nominal Impedance	Nominal Impedance	Nominal Impedance	Nominal Impedance
8 Ohms	8 Ohms	8 Ohms	8 Ohms	8 Ohms	8 Ohms	8 Ohms
Sensitivity (2.83V/1m)	Sensitivity (2.83V/1m)	Sensitivity (2.83V/1m)	Sensitivity (2.83V/1m)	Sensitivity (2.83V/1m)	Sensitivity (2.83V/1m)	Sensitivity (2.83V/1m)
88dB	90dB	90dB	91dB	91dB	91dB	91dB
Frequency	Frequency	Frequency	Frequency	Frequency	Frequency	Frequency
Response (–3dB)	Response (-3dB)	Response (-3dB)	Response (-3dB)	Response (-3dB)	Response (-3dB)	Response (–3dB)
50Hz – 20kHz	45Hz – 20kHz	40Hz – 20kHz	38Hz – 20kHz	36Hz – 20kHz	33Hz – 20kHz	75Hz – 20kHz
Crossover	Crossover	Crossover	Crossover	Crossover	Crossover	Crossover
Frequency	Frequencies	Frequencies	Frequencies	Frequencies	Frequencies	Frequencies
4000Hz	800Hz, 3200Hz	1000Hz, 4000Hz	300Hz, 4000Hz	300Hz, 4000Hz	1000Hz, 5000Hz	800Hz, 3200Hz
High-Frequency	High-Frequency	High-Frequency	High-Frequency	High-Frequency	High-Frequency	High-Frequency
Transducer	Transducer	Transducer	Transducer	Transducer	Transducer	Transducer
19mm Titaniumlaminate	19mm Titaniumlaminate	19mm Titaniumlaminate	19mm Titaniumlaminate	19mm Titaniumlaminate	19mm Titaniumlaminate	19mm Titaniumlaminate
dome, shielded	dome, shielded	dome, shielded	dome, shielded	dome, shielded	dome, shielded	dome, shielded
Midrange Transducer NA	Midrange Transducer 100mm PolyPlas,™ shielded	Midrange Transducer 100mm PolyPlas,™ shielded	Midrange Transducer 100mm PolyPlas,™ shielded	Midrange Transducer 100mm PolyPlas,™ shielded	Midrange Transducer 100mm PolyPlas,™ shielded	Midrange Transducer 75mm PolyPlas,™ shielded
Low-Frequency	Low-Frequency	Low-Frequency	Low-Frequency	Low-Frequency Transducers Dual 200mm PolyPlas,™ shielded	Low-Frequency	Low-Frequency
Transducer	Transducer	Transducer	Transducers		Transducers	Transducers
170mm PolyPlas,™	200mm PolyPlas,™	200mm PolyPlas,™	Dual 170mm PolyPlas,™		Dual 250mm PolyPlas,The	^M Dual 133mm PolyPlas,™
shielded	shielded	shielded	shielded		shielded	shielded
Baffle	Baffle	Baffle	Baffle	Baffle	Baffle	Baffle
Low diffraction,	Low diffraction,	Low diffraction,	Low diffraction,	Low diffraction,	Low diffraction,	Low diffraction,
IsoPower™	IsoPower™	IsoPower TM	IsoPower™	IsoPower™	IsoPower TM	IsoPower™
Port	Ports	Port	Port	Port	Port	Port
FreeFlow™ flared	Dual FreeFlow™ flared	FreeFlow™ flared	FreeFlow™ flared	FreeFlow™ flared	FreeFlow™ flared	FreeFlow™ flared
Network	Network	Network	Network	Network	Network	Network
Straight-Line	Straight-Line	Straight-Line	Straight-Line	Straight-Line	Straight-Line	Straight-Line
Signal Path™ (SSP)	Signal Path™ (SSP)	Signal Path™ (SSP)	Signal Path™ (SSP)	Signal Path™ (SSP)	Signal Path™ (SSP)	Signal Path™ (SSP)
Terminals Gold-plated, 5-way binding posts, bi-wirable	Terminals Gold-plated, 5-way binding posts, bi-wirable	Terminals Gold-plated, 5-way binding posts, bi-wirable	Terminals Gold-plated, 5-way binding posts, bi-wirable	Terminals Gold-plated, 5-way binding posts, bi-wirable	Terminals Gold-plated, 5-way binding posts, bi-wirable	Terminals Gold-plated, 5-way e binding posts, bi-wirable
,	Dimensions (H x W x D) 292mm x 445mm x 311mm	,	Dimensions (H x W x D) 927mmx 213mm x 343mm			Dimensions (H x W x D) n 185mm x 558mm x 264mm
Weight Per Speaker	Weight Per Speaker 25 lb/11.4kg	Weight Per Speaker	Weight Per Speaker	Weight Per Speaker	Weight Per Speaker	Weight Per Speaker
16.3 lb/7.4kg		35 lb/15.9kg	40 lb/18.2kg	48 lb/21.8kg	55 lb/25kg	22 lb/10kg

IBL PRO SOUND COMES HOME™

JBL Consumer Products, 250 Crossways Park Drive, Woodbury, NY 11797 8500 Balboa Boulevard, Northridge, CA 91329

2, route de Tours, 72500 Chateau-du-Loir, France 516.255.4JBL (4525) www.jbl.com

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Part No. 350038-002

- * Trademarks of Dolby Laboratories.
- DTS is a registered trademark of Digital Theater Systems, Inc.
- ** The maximum recommended amplifier power rating will ensure proper system headroom to allow for occasional peaks. We do not recommend sustained operation at these maximum power levels.

All features and specifications are subject to change without notice.

All dimensions include grilles and feet, but not spikes.